AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-42 (canceled).

Claim 43 (new): A remote education system that enables education over distances using multimedia bi-directional communication, including audio and video, comprising:

student audio-video acquisition means for acquiring audio and video of a student who is attending a remote education program via a student terminal;

facial image matching means for matching the video acquired by the student audio-video acquisition means with a pre-registered facial image of the student;

action request means for sending a message to the student terminal for requesting an audio response to a certain question;

audio response detection means for detecting an audio response of the student from the audio that is currently being acquired by the student audio-video acquisition means within a predetermined time after sending the message by the action request means, and confirming that the detected audio response of the student corresponds to the requested audio response of the student; and

mouth movement detection means for detecting mouth movement of the student from the acquired video while the audio response is being detected by the audio response detection means, and confirming that the detected mouth movement of the student corresponds to the audio response of the student detected by the audio response detection means.

Claim 44 (new): The remote education system according to claim 43, wherein:

the audio response detection means includes means for performing speech recognition of the detected audio response, and means for comparing the result of the speech recognition with the requested audio response to confirm that the audio response provided by the student corresponds to the requested audio response of the student; and

the mouth movement detection means includes means for extracting mouth shape parameters of the student by feature extraction means from the acquired video, and means for comparing the extracted mouth shape parameters of the student with mouth shape parameters obtained from the result of the speech recognition obtained by the audio response detection means to confirm that the mouth movement of the student corresponds to the audio response of the student.

Claim 45 (new): The remote education system according to claim 43, further comprising:

student data registration means for registering the audio response data of the student responding to a plural kinds of questions, and mouth shape parameters detected from the acquired video response of the student therewith; wherein

the action request means includes means for sending a message to the student terminal for requesting an audio response to a randomly selected question, and an audio response provided by the student in response to the randomly selected question is registered by the student data registration means;

the audio response detection means includes means for matching the detected audio response with the corresponding audio response data of the student registered by the student data registration means to confirm that the audio response of the student corresponds to the requested audio response of the student; and

the mouth movement detection means includes means for extracting mouth shape parameters by feature extraction means, and means for matching the extracted mouth shape parameters with the corresponding mouth shape parameters of the

student registered by the student data registration means to confirm that the mouth movement of the student corresponds to the audio response of the student.

Claim 46 (new): The remote education system according to claim 43, further comprising:

student data registration means for registering audio response data and video response data of the student responding to a plural kinds of questions; wherein

the action request means includes means for sending a message to the student terminal for requesting an audio response to a randomly selected question, and in response thereto, audio response data and video response data provided by the student is registered by the student data registration means;

the audio response detection means includes means for matching the detected audio response with the corresponding audio response data of the student registered by the student data registration means to confirm that the audio response of the student corresponds to the requested audio response of the student; and

the mouth movement detection means includes means for matching the acquired video of the student with the corresponding video response data of the student registered by the student data registration means to confirm the mouth movement of the student corresponds to the audio response of the student.

Claim 47 (new): The remote education system according to claim 43, further comprising:

means for detecting the position of the face of the student continuously from the video that is currently being acquired by the student audio-video acquisition means; and

means for confirming that the detected position of the face does not change in a discontinuous manner.

Claim 48 (new): The remote education system according to claim 43, wherein

the action request means includes means for sending the message to the student terminal at unpredictable times.

Claim 49 (new): A remote education system that enables education over distances using multimedia bi-directional communication, including audio and video, comprising:

student video acquisition means for acquiring video of a student via a student terminal;

facial image matching means for matching the video acquired by the student video acquisition means with a pre-registered facial image of the student;

action request means for sending a message to the student terminal for requesting the student to change the position of the face to a randomly selected position; and

facial position detection means for detecting the position of the face continuously from the video that is currently being acquired by the student video acquisition means, and confirming that the detected position of the face does not change in a discontinuous manner and moves to the corresponding position requested by the action request means within a predetermined time after sending the message by the action request means.

Claim 50 (new): The remote education system according to claim 49, wherein

the action request means includes means for sending the message to the student terminal at unpredictable times.

Claim 51 (new): An attendance confirmation method of confirming whether a legitimate student is attending a remote education program, the method comprising:

a student audio-video acquisition step of acquiring audio and video of a student who is attending the remote education program via a student terminal;

a facial image matching step of matching the video acquired by the student audio-video acquisition step with a pre-registered facial image of the student;

an action request step of sending a message to the student terminal for requesting an audio response to a certain question;

an audio response detection step of detecting an audio response of the student from the audio that is currently being acquired by the student audio-video acquisition step within a predetermined time after sending the message by the action request step, and confirming that the detected audio response of the student corresponds to the requested audio response of the student; and

a mouth movement detection step of detecting mouth movement of the student from the acquired video while the audio response is being detected by the audio response detection step, and confirming that the detected mouth movement of the student corresponds to the audio response of the student detected by the audio response detection step.

Claim 52 (new): The attendance confirmation method according to claim 51, wherein

the audio response detection step includes a step of performing speech recognition of the detected audio response, and a step of comparing the result of the speech recognition with the requested audio response to confirm that the audio response of the student corresponds to the requested audio response of the student; and

the mouth movement detection step includes a step of extracting mouth shape parameters of the student by feature extraction means from the acquired video, and a step of comparing the extracted mouth shape parameters of the student with mouth shape parameters obtained from the result of the speech recognition obtained by the audio response detection step to confirm that the mouth movement of the student corresponds to the audio response of the student.

Claim 53 (new): The attendance confirmation method according to claim 51, further comprising:

a student data registration step of registering the audio response data of the student responding to a plural kinds of questions and mouth shape parameters detected from the acquired video response of the student therewith; wherein

the action request step includes a step of sending a message to the student terminal for requesting an audio response to a randomly selected question, and an audio response provided by the student in response to the randomly selected question is registered by the student data registration step;

the audio response detection step includes a step of matching the detected audio response with the corresponding audio response data of the student registered by the student data registration step to confirm that the audio response of the student corresponds to the requested audio response of the student; and

the mouth movement detection step includes a step of extracting mouth shape parameters by feature extraction means, and a step of matching the extracted mouth shape parameters with the corresponding mouth shape parameters of the student registered by the student data registration step to confirm that the mouth movement of the student corresponds to the audio response of the student.

Claim 54 (new): The attendance confirmation method according to claim 51, further comprising:

a student data registration step of registering audio response data and video response data of the student responding to a plural kinds of questions; wherein

the action request step includes a step of sending a message to the student terminal for requesting an audio response to a randomly selected question, and an audio response provided by the student in response to the randomly selected question is registered by the student data registration step;

the audio response detection step includes a step of matching the detected audio response with the corresponding audio response data of the student registered by the student data registration step to confirm that the audio response of the student corresponds to the requested audio response of the student; and

the mouth movement detection step includes a step of matching the acquired video of the student with the corresponding video response data of the student registered by the student data registration step to confirm that the mouth movement of the student corresponds to the audio response of the student.

Claim 55 (new): The attendance confirmation method according to claim 51, further comprising:

a step of detecting the position of the face of the student continuously from the video that is currently being acquired by the student audio-video acquisition step; and

a step of confirming that the detected position of the face does not change in discontinuous manner.

Claim 56 (new): The attendance confirmation method according to claim 51, wherein

the action request step includes a step of sending the message to the student terminal at unpredictable times.

Claim 57 (new): A computer readable medium having computer executable instructions for performing the attendance confirmation method according to claim 51.

Claim 58 (new): An attendance confirmation method of confirming whether a legitimate student is attending a remote education program, the method comprising:

a student video acquisition step of acquiring video of a student via a student terminal;

a facial image matching step of matching the video acquired by the student video acquisition step with a pre-registered facial image of the student;

an action request step of sending a message to the student terminal for requesting the student to change the position of the face to a randomly selected position; and

a facial position detection step of detecting the position of the face continuously from the video that is currently being acquired by the student video acquisition step, and confirming that the detected position of the face does not change in a discontinuous manner and moves to the corresponding position requested by the action request means within a predetermined time after sending the message by the action request step.

Claim 59 (new): The attendance confirmation method according to claim 58, wherein

the action request step includes a step of sending the message to the student terminal at unpredictable times.

Claim 60 (new): A computer readable medium having computer executable instructions for performing the attendance confirmation method according to Claim 58.